

WE CLAIM:

- 1 1. A body-on-frame apparatus for a vehicle, the body-on-frame apparatus
2 comprising:
3 a vehicle frame adapted for receiving a vehicle body ; and
4 a vehicle body mounted on the frame in a spaced relationship thereto, and
5 including a localized area that is deflectable when an operating load is applied to the
6 localized area of the body;
7 the localized area of the body forming a localized gap between the frame
8 and the localized area of the body, when the body is mounted on the frame in a spaced
9 relationship thereto, that closes and allows the localized area of the body to contact the
10 vehicle frame for resisting further localized deflection of the localized area of the body
11 when the operating load is applied to the localized area of the body.
- 1 2. The body-on-frame apparatus of claim 1, wherein the gap is closed, and
2 the localized area of the body contacts the frame, when a predetermined amount of
3 localized load is applied to the localized area of the body.
- 1 3. The body-on-frame apparatus of claim 1, further comprising a load bearing
2 structure operatively attached to the localized area of the body for applying the operating
3 load to the localized area.
- 1 4. The body-on-frame apparatus of claim 3, wherein the load bearing
2 structure includes a passenger seating structure, and the operating load is applied to the
3 seating structure.

1 5. The body-on-frame apparatus of claim 4, wherein the seating structure
2 includes anchorages for a child restraint apparatus, and the operating load is applied to the
3 seating structure by a load applying structure attached to the anchorages for the child
4 restraint apparatus.

1 6. The body-on-frame apparatus of claim 3, wherein:
2 the frame includes an upper surface thereof adapted for contact by the
3 localized area of the body; and
4 the body includes a lower surface thereof defining the localized area of the
5 body.

1 7. The body-on-frame apparatus of claim 6, wherein the body includes a
2 crossmember defining the lower surface and localized area of the body.

1 8. The body-on-frame apparatus of claim 7, wherein the load bearing
2 structure includes a passenger seating structure, and the operating load is applied to the
3 seating structure.

1 9. The body-on-frame apparatus of claim 8, wherein the seating structure
2 includes anchorages for a child restraint apparatus, and the operating load is applied to the
3 seating structure by a load applying structure attached to the anchorages for the child
4 restraint apparatus.

1 10. A vehicle body apparatus adapted for attachment to a vehicle frame in a
2 spaced relationship thereto, the vehicle body apparatus comprising:
3 a vehicle body including a localized area that is deflectable by an operating
4 load applied to the localized area when the body is attached to the frame in a spaced
5 relationship thereto;

6 the localized area of the body forming a localized gap between the frame
7 and the localized area of the body, when the body is mounted on the frame in a spaced
8 relationship thereto, that closes and allows the localized area of the body to contact the
9 frame for resisting further localized deflection of the localized area of the body when the
10 operating load is applied to the localized area of the body.

1 11. The vehicle body apparatus of claim 10, wherein the gap is closed, and the
2 localized area of the body contacts the frame, when a predetermined amount of localized
3 load is applied to the localized area of the body.

1 12. The vehicle body apparatus of claim 10, further comprising a load bearing
2 structure operatively attached to the localized area of the body for applying the operating
3 load to the localized area.

1 13. The vehicle body apparatus of claim 12, wherein the load bearing structure
2 includes a passenger seating structure, and the operating load is applied to the seating
3 structure.

1 14. The vehicle body apparatus of claim 13, wherein the seating structure
2 includes anchorages for a child restraint apparatus, and the operating load is applied to the
3 seating structure by a load applying structure attached to the anchorages for the child
4 restraint apparatus.

1 15. The vehicle body apparatus of claim 12, wherein:
2 the frame includes an upper surface thereof adapted for contact by the
3 localized area of the body; and
4 the body includes a lower surface thereof defining the localized area of the
5 body.

1 16. The vehicle body apparatus of claim 6, wherein the body includes a
2 crossmember defining the lower surface and localized area of the body.

1 17. The vehicle body apparatus of claim 16, wherein the load bearing structure
2 includes a passenger seating structure, and the operating load is applied to the seating
3 structure.

1 18. The vehicle body apparatus of claim 17, wherein the seating structure
2 includes anchorages for a child restraint apparatus, and the operating load is applied to the
3 seating structure by a load applying structure attached to the anchorages for the child
4 restraint apparatus.

1 19. A method for constructing a body-on-frame vehicle, the method
2 comprising:
3 fabricating a vehicle body including a localized area that is deflectable by
4 an operating load applied to the localized area, when the body is attached to a frame in a
5 spaced relationship thereto; and
6 attaching the vehicle body to a frame in such a manner that the localized
7 area of the body forms a localized gap between the frame and the localized area of the
8 body, when the body is mounted on the frame in a spaced relationship thereto, that closes
9 and allows the localized area of the body to contact the frame for resisting further
10 localized deflection of the localized area of the body when the operating load is applied to
11 the localized area of the body.

1 20. The method of claim 19, further comprising fabricating the vehicle body
2 such that the gap is closed and the localized area of the body contacts the frame when the
3 operating load applied to the localized area reaches a predetermined value.